Abstract of the Disclosure

A heart valve sewing prosthesis including an intrinsically conductive polymer. The invention includes annuloplasty rings and bands, and sewing rings or cuffs for prosthetic heart valves. Some annuloplasty rings and sewing rings include fabric that is coated with an intrinsically conductive polymer. The coating can be formed over individual filaments or fibers, or on the fabric surface as a surface layer. One intrinsically conductive polymer is polypyrrole. The intrinsically conductive polymer can be doped to facilitate the intrinsic conductivity. Some devices have a polypyrrole surface layer doped with dialkyl-napthalene sulfonate. The intrinsically conductive polymer can be deposited on a fabric using in-situ polymerization of monomeric or oligomeric species, together with a dopant. Animal studies using implanted annuloplasty rings having an intrinsically conductive polymer coating have demonstrated a substantial reduction in pannus formation and inflammatory response.